

IN THE CLAIMS:

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8. (Currently Amended) A system ~~for communicating accumulated state information between tasks in a learning system~~, comprising:
 - an incremental learner that receives training instances;
 - a hypothetical learning task state representation storage that is initialized, prior to receiving said training instances, to indicate no training instance have been received, and that is updated with the default target value for each new training instance;
 - a state representation storage that
 - stores an initialized new learning task state representation based on the hypothetical learning task state representation, ~~and that~~
 - stores updated state representation for each learning task based on the target value for the received training instance, ~~and that~~
 - updates the hypothetical learning task with a default target value for each received training instance.
9. (Original) The system of claim 8, further comprising a predictor storage which encodes a predictor based on each learning task state representation.
10. (Original) The system of claim 8, wherein the default target values reflect negative examples.
11. (Original) The system of claim 9, further comprising an applier that produces a prediction based on the predictor.

12. (Original) The system of claim 9 wherein the predictor storage encodes at least one of Boolean functions, regression models and neural network.

13. (Original) The system of claim 9 wherein the predictor storage is used by another learning system.

14. (Original) The system of claim 8 where the learning system is an incremental supervised learning system.

15. (New) A system responsive to received training sequences, which each training sequence includes a feature vector and at least one task target value, comprising:

a memory for storing a representation of all received training sequences, where each received is represented by a row in a table, and each task is represented by a column in said table, and said at least one target value is either an indication of a positive example, or a negative example; and

a processor that is adapted to develop a predictor for a new task by creating an additional column in said table, encoding all past received training sequences as negative examples in said additional column, thereby conditioning said system to receive training sequences with task target values corresponding to said new task.

16. (New) The system of claim 15 where said processor creates a predictor for each of said tasks based on information in said memory.